

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application. The listing of claims presents each claim with its respective status shown in parentheses.

1. **(Original)** Apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a support member in the seat formed from a resilient material, wherein the support member includes:

an integral air flow channel that extends through the support member from a bottom surface to a top surface of the support member, the air flow channel having an inlet at the bottom surface of the support member for receiving temperature conditioned air therein, and further having an outlet at the top surface of the support member for dispensing temperature conditioned air therefrom; and

at least one air subchannel integral with and extending along a top surface of the support member, wherein the air subchannel is connected with the outlet of the air flow channel; and

a porous member which substantially covers the top surface area of the support member, the porous member having an interface with the air subchannel; and

a seat cover that substantially encapsulates the porous member to the support member.

2. **(Original)** An apparatus as defined in claim 1 wherein the porous member comprises:

a first porous member that is disposed adjacent and substantially covers the top surface of the support member; and

a second porous member substantially encapsulating the first porous member.

3. **(Original)** An apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a seat cushion in the seat formed from a resilient material including:

an integral air flow channel extending vertically therethrough from a top surface of the seat cushion to a bottom surface of the seat cushion, wherein the air flow channel has an inlet adjacent the bottom surface of the seat cushion for receiving temperature conditioned air therein, and further has an outlet adjacent the top surface of the seat cushion for dispensing temperature conditioned air therefrom; and

a porous member which substantially covers the top surface area of the seat cushion;

at least one air subchannel that is integral with and extends along the top surface of the seat cushion, wherein the air subchannel is connected with the outlet of the air flow channel, and wherein the porous member is contact with the air subchannel; and

a seat covering substantially encapsulating the porous member to the seat cushion.

4. **(Original)** An apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a seat cushion in the seat formed from a resilient material including:

an integral air flow channel extending vertically therethrough from a top surface of the seat cushion to a bottom surface of the seat cushion, wherein the air flow channel has an inlet adjacent the bottom surface of the seat cushion for receiving temperature conditioned air therein, and further has an outlet adjacent the top surface of the seat cushion for dispensing temperature conditioned air therefrom; and

a porous member which substantially covers the top surface area of the seat cushion;

at least one air subchannel that is integral with and extends along the top surface of the seat cushion, wherein the air subchannel is connected with the outlet of the air flow channel, and wherein the porous member is contact with the air subchannel;

an air manifold integral with and extending along the top surface of the seat cushion, wherein the air manifold is interposed between the outlet of the air flow channel and the air subchannel to facilitate the distribution of temperature conditioned air therebetween; and

a seat covering substantially encapsulating the porous member to the seat cushion.

5. **(Original)** Apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

- a support member in the seat in the form of a resilient cushion, wherein the support member includes:

- an air flow channel integral with the support member and extending therethrough from a bottom surface to a top surface of the support member, wherein the air flow channel has an inlet at the bottom surface for receiving temperature conditioned air, and an outlet at the top surface for dispensing temperature conditioned air;

- at least one air subchannel integral with and extending along the top surface of the support member; and

- an air manifold integral with and extending along the top outer surface of the support member between the air flow channel outlet and the air subchannel for dispersing temperature conditioned air from the air flow channel to the air subchannel; and

- a flexible porous member disposed over the top surface of the support member and having an interface with the air subchannel; and

- a flexible seat cover substantially encapsulating an outer surface of the flexible porous member.

6. **(Original)** The apparatus as recited in claim 5 wherein the resilient cushion can be selected from the group of materials consisting of cellular spongy material, foam, and fiberglass reinforced plastic.

7. **(Original)** The apparatus as recited in claim 5 wherein the flexible porous member comprises:

- a first porous member substantially covering the top surface of the support member and having an interface with the air subchannels; and

- a second porous member substantially encapsulating the first porous member.

8. **(Original)** A method for selectively varying the environmental temperature of a vehicle seat comprising the steps of:

- routing temperature conditioned air from an air inlet to an air outlet of an air flow channel extending through a support member of the seat;

distributing temperature conditioned air from the air outlet along a top surface of the support member through at least one air subchannel disposed within the top surface;

passing temperature conditioned air from the air subchannels through a porous member disposed adjacent the outer surface, and then to a seat covering disposed adjacent the porous member.

9. **(Original)** A method as recited in claim 8 wherein the temperature conditioned air is routed from a bottom surface of the support member to a top surface of the support member.

10-27. **(Canceled)**

28. **(Previously Presented)** A method for selectively varying the environmental temperature of a seat, comprising the steps of:

routing temperature-conditioned air from an air inlet to an air outlet of an airflow channel extending through a support member of the seat;

distributing temperature conditioned air from the air outlet along a top surface of the support member to at least one air subchannel disposed within the stop surface;

passing the air through an air-porous member positioned on the support member and over the at least one air subchannel, through an intermediate layer interposed between the support member and the air-porous member, and away from an air-impermeable barrier located on a side of the air subchannel opposite the air-porous member; and

passing temperature-conditioned air from the air subchannels through the porous member and subsequently to a seat covering substantially encapsulating the air-porous member to the support member.

29. **(Previously Presented)** The method as recited in Claim 28, wherein the temperature-conditioned air is routed from a bottom surface of the support member to a top surface of the support member.

30. **(Previously Presented)** A method as recited in Claim 28, wherein the support member comprises a resilient material, and the air-porous member comprises a layer of air-permeable support material which is selected to be substantially less stretchable than the resilient material of the support member.

31. **(Previously Presented)** A method for selectively varying the environmental temperature of a seat, comprising the steps of:

routing temperature-conditioned air from an air inlet to an air outlet of an airflow channel extending through a support member of the seat;

distributing temperature-conditioned air from the air outlet along a top surface of the support member to at least one air subchannel to resist crushing of the air subchannel disposed within the top surface;

placing a liner in the air subchannel to resist crushing of the air subchannel when the weight of a seat occupant is placed on the support member and the air subchannel;

passing the air through an air-porous member positioned on the support member and over the at least one air subchannel; and

passing temperature-conditioned air from the air subchannels through the porous member and subsequently to a seat covering substantially encapsulating the air-porous member to the support member.

32. **(Previously Presented)** A method as recited in Claim 31, comprising the further step of passing air through the liner to the air-porous member.

33. **(Previously Presented)** A method as recited in Claim 32, comprising the further step of affixing the liner to the wall of the air subchannel and passing the temperature-conditioned air through the liner as it is affixed to the wall.

34. **(Previously Presented)** A method as recited in Claim 28, wherein the air-porous member has a plurality of holes and the air passes through the holes.

35. **(Previously Presented)** A method as recited in Claim 28, wherein the air-porous member is adhered to the support member so that the air-porous member helps to resist collapse and blockage of the air subchannel as air passes therethrough.

36. **(Canceled)**

37. **(Previously Presented)** A method as recited in Claim 28, wherein the intermediate layer is selected to comprise a structural screen making it difficult for a seat occupant to feel the channels when the seat occupant is sitting on the seat.

38. **(Previously Presented)** A method as recited in Claim 28, comprising the further step of adhering the air-porous member to the support member.

39. (New) Apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a support member in the seat formed from a resilient material, wherein the support member includes:

an integral air flow channel that extends through the support member from a bottom surface to a top surface of the support member, the air flow channel having an inlet at the bottom surface of the support member for receiving temperature conditioned air therein, and further having an outlet at the top surface of the support member for dispensing temperature conditioned air therefrom;

at least one air subchannel that is molded or formed in the support member and extends adjacent the top surface of the support member, wherein the air subchannel is connected with the outlet of the air flow channel; and

an air-impermeable barrier on a side of the air subchannel opposite the top surface of the support member;

a porous member which substantially covers the top surface area of the support member, the porous member having an interface with the air subchannel; and

a seat cover that substantially encapsulates the porous member to the support member.

40. (New) An apparatus as defined in claim 39 wherein the porous member comprises:

a first porous member that is disposed adjacent and substantially covers the top surface of the support member; and

a second porous member substantially encapsulating the first porous member.

41. (New) An apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a seat cushion in the seat formed from a resilient material including:

an integral air flow channel extending vertically therethrough from a top surface of the seat cushion to a bottom surface of the seat cushion, wherein the air flow channel has an inlet adjacent the bottom surface of the seat cushion for receiving temperature conditioned air therein, and further has an outlet adjacent

the top surface of the seat cushion for dispensing temperature conditioned air therefrom; and

a porous member which substantially covers the top surface area of the seat cushion;

at least one air subchannel that is molded or formed in the seat cushion and extends adjacent the top surface of the seat cushion, wherein the air subchannel is connected with the outlet of the air flow channel, and wherein the porous member is contact with the air subchannel;

an air-impermeable barrier on a side of the air subchannel opposite the top surface of the support member; and

a seat covering substantially encapsulating the porous member to the seat cushion.

42. (New) An apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a seat cushion in the seat formed from a resilient material including:

an integral air flow channel extending vertically therethrough from a top surface of the seat cushion to a bottom surface of the seat cushion, wherein the air flow channel has an inlet adjacent the bottom surface of the seat cushion for receiving temperature conditioned air therein, and further has an outlet adjacent the top surface of the seat cushion for dispensing temperature conditioned air therefrom; and

a porous member which substantially covers the top surface area of the seat cushion;

at least one air subchannel that is molded or formed in the seat cushion and extends adjacent the top surface of the seat cushion, wherein the air subchannel is connected with the outlet of the air flow channel, and wherein the porous member is contact with the air subchannel;

an air-impermeable barrier on a side of the air subchannel opposite the top surface of the support member;

an air manifold integral with and extending along the top surface of the seat cushion, wherein the air manifold is interposed between the outlet of the air flow channel

and the air subchannel to facilitate the distribution of temperature conditioned air therebetween; and

a seat covering substantially encapsulating the porous member to the seat cushion.

43. (New) Apparatus for selectively varying the environmental temperature of a vehicle seat comprising:

a support member in the seat in the form of a resilient cushion, wherein the support member includes:

an air flow channel integral with the support member and extending therethrough from a bottom surface to a top surface of the support member, wherein the air flow channel has an inlet at the bottom surface for receiving temperature conditioned air, and an outlet at the top surface for dispensing temperature conditioned air;

at least one air subchannel that is molded or formed in the support member and extends adjacent the top surface of the support member;

an air-impermeable barrier on a side of the air subchannel opposite the top surface of the support member;

an air manifold integral with and extending along the top outer surface of the support member between the air flow channel outlet and the air subchannel for dispersing temperature conditioned air from the air flow channel to the air subchannel;

a flexible porous member disposed over the top surface of the support member and having an interface with the air subchannel; and

a flexible seat cover substantially encapsulating an outer surface of the flexible porous member.

44. (New) The apparatus as recited in claim 43 wherein the resilient cushion can be selected from the group of materials consisting of cellular spongy material, foam, and fiberglass reinforced plastic.

45. (New) The apparatus as recited in claim 43 wherein the flexible porous member comprises:

a first porous member substantially covering the top surface of the support member and having an interface with the air subchannels; and

a second porous member substantially encapsulating the first porous member.

46. (New) A method for selectively varying the environmental temperature of a vehicle seat comprising the steps of:

routing temperature conditioned air from an air inlet to an air outlet of an air flow channel extending through a support member of the seat;

distributing temperature conditioned air from the air outlet along a top surface of the support member through at least one air subchannel disposed within the top surface;
and

passing temperature conditioned air from the air subchannels in a direction opposite an air-impermeable barrier, through a porous member disposed adjacent the top surface, and then to a seat covering disposed adjacent the porous member.

47. (New) A method as recited in claim 46 wherein the temperature conditioned air is routed from a bottom surface of the support member to a top surface of the support member.